

CLAIMS:

1. Rake receiver comprising at least two fingers (1,2,3), a combiner (4) coupled to said fingers (1,2,3) and a compensator, characterized in that at least one finger comprises a finger compensator (20-25).

5 2. Rake receiver according to claim 1, characterized in that said finger compensator (20-25) comprises a filter (21) and an amplitude normalizer (22) coupled serially for receiving an input symbol signal and for generating an output symbol signal.

3. Rake receiver according to claim 2, characterized in that said finger
10 compensator (20-25) further comprises a first arithmetical module (20) for multiplying said input symbol signal with a conjugated previous input symbol signal and a second arithmetical module (25) for multiplying said output symbol signal with a previous output symbol signal.

4. Rake receiver according to claim 3, characterized in that said at least one
15 finger (1,2,3) comprises a pilot channel correlator (10) and a traffic channel correlator (12), with an output of said finger compensator (20-25) being coupled to first inputs of a third and fourth arithmetical module (13,14), of which second inputs are coupled to outputs of said correlators (10,12).

20 5. Rake receiver according to claim 4, characterized in that said at least one finger (1,2,3) comprises an averaging unit (15), of which an input is coupled to an output of said third arithmetical module (13) and of which an output is coupled to a first input of a fifth arithmetical module (16), of which a second input is coupled to an output of said fourth arithmetical module (14).

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6. Rake receiver according to claim 1, characterized in that most fingers (1,2,3) each comprise a finger compensator (20-25), with all finger compensators together forming said compensator.

7. Rake receiver according to claim 6, characterized in that said rake receiver comprises a mixer (6) for converting intermediate frequency signals into baseband signals, which mixer (6) comprises an oscillator input coupled to a stable oscillator (7).

5 8. Finger (1,2,3) for use in a rake receiver comprising at least two fingers (1,2,3), a combiner (4) coupled to said fingers (1,2,3) and a compensator, characterized in that said finger (1,2,3) comprises a finger compensator (20-25).

9. System comprising at least one portable unit and at least one network unit for
10 radio communication, with at least one unit comprising at least one rake receiver comprising at least two fingers (1,2,3), a combiner (4) coupled to said fingers (1,2,3) and a compensator, characterized in that at least one finger (1,2,3) comprises a finger compensator (20-25).

10. Portable unit comprising at least one rake receiver comprising at least two
15 fingers (1,2,3), a combiner (4) coupled to said fingers (1,2,3) and a compensator, characterized in that at least one finger (1,2,3) comprises a finger compensator (20-25).

11. Network unit comprising at least one rake receiver comprising at least two
20 fingers (1,2,3), a combiner (4) coupled to said fingers (1,2,3) and a compensator, characterized in that at least one finger (1,2,3) comprises a finger compensator (20-25).

12. Method for compensating signals in correspondance with at least part of a rake
receiver and comprising at least two finger processing steps (30-40), a combining step and a
compensating step, characterized in that at least one finger processing step (30-40) comprises
25 a substep of compensating further signals (33-38).

13. Processor program product for implementing at least part of a rake receiver
and comprising at least two finger functions (30-40), a combining function and a
compensating function to be run via a processor, characterized in that at least one finger
30 function (30-40) comprises a finger compensating function (33-38).

14. Processor program product for implementing a finger and comprising a finger
function to be run via a processor and for use in combination with at least part of a rake
receiver at least partly implemented by at least two finger functions (30-40), a combining

function and a compensating function to be run via said processor, characterized in that said finger function (30-40) comprises a finger compensating function (33-38).